Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (amended) A method of detecting unidentified slave devices in a system including a master device and a plurality of slave devices, comprising the following steps:

a) providing each slave device in the system with an identification and pre-loading one or more slave device identifications into the master device;

b) after step a), connecting at least one slave device to the system;

c) after step b), issuing a detection command on the system from the master device; and,

d) after step c), issuing a response only from any slave devices on the system ~~for which identification information has not been loaded in~~ that have not been identified to the master device, each said response including the slave device's identification.

2. (original) The method of claim 1, wherein said response further includes other information pertaining to the slave device.

3. (original) The method of claim 1, further comprising the step of said master device issuing a request for other information to any slave devices that responded in step d).

4. (previously presented) The method of claim 1, wherein if a slave device responds in step d), step c) is repeated until no slave device responds in step d).

5. (amended) The method of claim 1, wherein step b) includes the step of connecting a plurality of slave device to the system, and said system and slave devices are configured and/or programmed so as to preclude more than one slave device from simultaneously responding in step d).

6. (amended) The method of claim [[1]] 5, wherein step a) includes the step of logging the identifications of a plurality of slave devices.

7. (amended) The method of claim 6, further comprising the step of setting a detection status flag high in each slave device the identification of which has been logged, wherein said detection status flag high represents a slave device is deemed to have been identified to the master device.

8. (amended) The method of claim 1, further comprising the step of issuing a clock sequence on the system after

issuing said detection command, said clock sequence comprising sequential clock pulses.

9. (previously presented) The method of claim 8, further comprising the step of slave devices counting said sequential clock pulses.

10. (original) The method of claim 9, further comprising the step of setting a detection status flag high in any slave devices that responded in step d).

11. (previously presented) The method of claim 1, wherein said system is an electronic blasting system, said master device is a blasting machine, and said slave device is an electronic detonator.

12. (previously presented) The method of claim 9, wherein said sequential clock pulses are correlated to possible identifications of slave devices by one or more calculations that include a cyclic redundancy check of identifications of slave devices and parameters sent by the master device.

13. (amended) The method of claim 1, wherein said detection command is issued along with data representing the identification of all slave devices for which identifications were pre-loaded in the master device in

step a), and step d) includes the step of each slave device receiving said detection command checking said data against the identification provided to said slave device in step a).

14. (amended) A slave device for use in a system including a master device and other slave devices connected to the system wherein the master device is pre-loaded with identification information corresponding to at least one slave device in the system, said slave device having an identification and being configured and/or programmed to issue a response to the master device including identification of the slave device in response to a detection command from the master device only if ~~the identification of~~ said slave device has not been ~~pre-loaded in~~ identified to the master device.

15. (previously presented) The slave device of claim 14, wherein said slave device is configured and/or programmed to issue said response upon issuance on the system of a clock value correlated to the identification of said slave device.

16. (original) The slave device of claim 15, wherein said slave device is further configured and/or programmed to include other information along with said response.

17. (original) The slave device of claim 16, wherein said slave device is an electronic detonator.

18. (amended) A system including a master device and a plurality of slave devices each connected to the master device and having an identification wherein the master device is pre-loaded with identification information corresponding to at least one slave device in the system, said system being configured and/or programmed so that, in response to a detection command from the master device, only any slave devices connected to the system ~~the identification of which~~ that have not been ~~pre-loaded in~~ identified to the master device send their identification to the master device ~~in response to a detection command~~.

19. (original) The system of claim 18, wherein said slave devices include detection flag status settings that can be set high or low.

20. (original) The system of claim 19, wherein said system is an electronic blasting system, said master device is a blasting machine, and said slave devices are electronic detonators.

21. (amended) A method of detecting unidentified slave devices in a system including a master device and a plurality of slave devices, comprising the following steps:

a) providing each slave device in the system with an identification;

b) after step a), connecting at least one slave device to the system;

c) after step b), issuing a detection command on the system from the master device; and,

d) issuing a clock sequence on the system after issuing said detection command, said clock sequence comprising sequential clock pulses correlated to possible identifications of slave devices such that each sequential clock pulse corresponds to a different multiplicity of possible identifications; and,

e) issuing a response only from any slave devices on the system ~~for which identification information has~~ that have not been ~~loaded in~~ identified to the master device, said response including the slave device's identification.

22. (new) A method of detecting unidentified slave devices in a system including a master device and a plurality of slave devices, comprising the following steps:

a) providing at least one slave device with an identification residing in a fixed memory in the slave device, and pre-loading one or more slave device identifications into the master device;

b) after step a), connecting at least one slave device to the system;

c) after step b), issuing a detection command on the system from the master device; and,

d) issuing a response to said detection command from any slave devices on the system that have not been identified to the master device, each said response including the slave device's identification.

23. (new) A slave device for use in a system including a master device and other slave devices, said slave device having an identification residing in a fixed memory in the slave device, said slave device being configured and/or programmed to issue a response to a detection command from the master device if said slave device has not been identified to said master device, said response including identification of the slave device.

24. (new) A system including a master device and a plurality of slave devices each connected to the master device and each having an identification residing in a

fixed memory in the slave device, said system being configured and/or programmed so that any slave devices connected to the system that have not been identified to the master device send their identification to the master device in response to a detection command.